

Filed-s70397 main sequence listing.txt
SEQUENCE LISTING

<110> Syngenta Ltd

<120> Methods for screening insecticides

<130> PPD 50397/WO

<160> 21

<170> PatentIn version 3.1

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<211> 2797

<212> DNA

<213> D. melanogaster

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<210> 2

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<213> Artificial sequence

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<223> Primer dhr96-F

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<213> Artificial sequence

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<223> Primer dhr96-R

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<212> DNA

<213> Artificial sequence

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<223> dhr96-fwd_primer

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<212> DNA

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<213> Artificial sequence

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<223> dhr96-rev_primer

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<210> 6

<211> 27

<212> DNA

<213> Artificial sequence

<220>

<223> dhr96-taqman_probe

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<210> 7

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> RpL32-fwd_primer

<400> 7
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<210> 8

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> RpL32-rev_primer

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<210> 9

<211> 24

<212> DNA

<213> Artificial sequence

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<223> RpL32-taqman_probe

<400> 9
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<211> 263

<212> PRT

<213> Artificial sequence

<220>

<223> DHR96_peptide2

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20 25 30

Asp Ile Met Asn Lys Phe Met Asn Thr Pro Ala Glu Ala Leu Arg Ile
35 40 45

Leu Asn Arg Ile Leu Ser Gly Gly Gly Ala Asn Ala Ala Gln Gln Thr
50 55 60

Ala Asp Arg Lys Pro Leu Leu Asp Lys Glu Pro Ala Val Lys Pro Ala
65 70 75 80

Ala Pro Ala Glu Arg Ala Asp Thr Val Ile Gln Ser Met Leu Gly Asn
85 90 95

Ser Pro Pro Ile Ser Pro His Asp Ala Ala Val Asp Leu Gln Tyr His
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100

105

110

Ser Pro Gly Val Gly Glu Gln Pro Ser Thr Ser Ser Ser His Pro Leu
115 120 125

Pro Tyr Ile Ala Asn Ser Pro Asp Phe Asp Leu Lys Thr Phe Met Gln
130 135 140

Thr Asn Tyr Asn Asp Glu Pro Ser Leu Asp Ser Asp Phe Ser Ile Asn
145 150 155 160

Ser Ile Glu Ser Val Leu Ser Glu Val Ile Arg Ile Glu Tyr Gln Ala
165 170 175

Phe Asn Ser Ile Gln Gln Ala Ala Ser Arg Val Lys Glu Glu Met Ser
180 185 190

Tyr Gly Thr Gln Ser Thr Tyr Gly Gly Cys Asn Ser Ala Ala Asn Asn
195 200 205

Ser Gln Pro His Leu Gln Gln Pro Ile Cys Ala Pro Ser Thr Gln Gln
210 215 220

Leu Asp Arg Glu Leu Asn Glu Ala Glu Gln Met Lys Leu Arg Glu Leu
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Arg Leu Ala Ser Glu Ala Leu Tyr Asp Pro Val Asp Glu Asp Leu Ser
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Ala Leu Met Met Gly Asp Asp
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<210> 11

<211> 440

<212> DNA

<213> D. melanogaster

<400> 11

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gcgcgcctcg aatgttcgcg aaaagagcgc cggagtataa atagaggcgc ttcgtctacg 240
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aattaaaagt aaccagcaac caagtaaadc aactgcaact actgaaatct gccaagaagt 420
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<211> 441

<212> DNA

<213> S. cerevisiae

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<210> 13

<211> 147

<212> PRT

<213> S. cerevisiae

<400> 13

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20 25 30

Lys Asn Asn Trp Glu Cys Arg Tyr Ser Pro Lys Thr Lys Arg Ser Pro
35 40 45

Leu Thr Arg Ala His Leu Thr Glu Val Glu Ser Arg Leu Glu Arg Leu
50 55 60

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Glu Gln Leu Phe Leu Leu Ile Phe Pro Arg Glu Asp Leu Asp Met Ile
65 70 75 80

Leu Lys Met Asp Ser Leu Gln Asp Ile Lys Ala Leu Leu Thr Gly Leu
85 90 95

Phe Val Gln Asp Asn Val Asn Lys Asp Ala Val Thr Asp Arg Leu Ala
100 105 110

Ser Val Glu Thr Asp Met Pro Leu Thr Leu Arg Gln His Arg Ile Ser
115 120 125

Ala Thr Ser Ser Ser Glu Glu Ser Ser Asn Lys Gly Gln Arg Gln Leu
130 135 140

Thr Val Ser
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<210> 14

<211> 1944

<212> DNA

<213> D. melanogaster

<400> 14

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gaaatattcg atttgaaaaa tcac 1944

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<210> 15

<211> 648

<212> PRT

<213> D. melanogaster

<400> 15

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Thr Asn Arg Ala Lys Arg Arg Leu Met Glu Asn Gly Thr Asp Ala Cys
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Asp Ala Asp Gly Gly Glu Glu Arg Asp His Lys Ala Pro Ala Asp Ser
35          40          45

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Ser Ser Ser Asn Leu Asp His Tyr Ser Gly Ser Gln Asp Ser Gln Ser
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Cys Gly Ser Ala Asp Ser Gly Ala Asn Gly Cys Ser Gly Arg Gln Ala
65 70 75 80

Ser Ser Pro Gly Thr Gln Val Asn Pro Leu Gln Met Thr Ala Glu Lys
85 90 95

Ile Val Asp Gln Ile Val Ser Asp Pro Asp Arg Ala Ser Gln Ala Ile
100 105 110

Asn Arg Leu Met Arg Thr Gln Lys Glu Ala Ile Ser Val Met Glu Lys
115 120 125

Val Ile Ser Ser Gln Lys Asp Ala Leu Arg Leu Val Ser His Leu Ile
130 135 140

Asp Tyr Pro Gly Asp Ala Leu Lys Ile Ile Ser Lys Phe Met Asn Ser
145 150 155 160

Pro Phe Asn Ala Leu Thr Val Phe Thr Lys Phe Met Ser Ser Pro Thr
165 170 175

Asp Gly Val Glu Ile Ile Ser Lys Ile Val Asp Ser Pro Ala Asp Val
180 185 190

Val Glu Phe Met Gln Asn Leu Met His Ser Pro Glu Asp Ala Ile Asp
195 200 205

Ile Met Asn Lys Phe Met Asn Thr Pro Ala Glu Ala Leu Arg Ile Leu
210 215 220

Asn Arg Ile Leu Ser Gly Gly Gly Ala Asn Ala Ala Gln Gln Thr Ala
225 230 235 240

Asp Arg Lys Pro Leu Leu Asp Lys Glu Pro Ala Val Lys Pro Ala Ala
245 250 255

Pro Ala Glu Arg Ala Asp Thr Val Ile Gln Ser Met Leu Gly Asn Ser
260 265 270

Pro Pro Ile Ser Pro His Asp Ala Ala Val Asp Leu Gln Tyr His Ser
275 280 285

Pro Gly Val Gly Glu Gln Pro Ser Thr Ser Ser Ser His Pro Leu Pro
290 295 300

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Tyr Ile Ala Asn Ser Pro Asp Phe Asp Leu Lys Thr Phe Met Gln Thr
 305 310 315 320
 Asn Tyr Asn Asp Glu Pro Ser Leu Asp Ser Asp Phe Ser Ile Asn Ser
 325 330 335
 Ile Glu Ser Val Leu Ser Glu Val Ile Arg Ile Glu Tyr Gln Ala Phe
 340 345 350
 Asn Ser Ile Gln Gln Ala Ala Ser Arg Val Lys Glu Glu Met Ser Tyr
 355 360 365
 Gly Thr Gln Ser Thr Tyr Gly Gly Cys Asn Ser Ala Ala Asn Asn Ser
 370 375 380
 Gln Pro His Leu Gln Gln Pro Ile Cys Ala Pro Ser Thr Gln Gln Leu
 385 390 395 400
 Asp Arg Glu Leu Asn Glu Ala Glu Gln Met Lys Leu Arg Glu Leu Arg
 405 410 415
 Leu Ala Ser Glu Ala Leu Tyr Asp Pro Val Asp Glu Asp Leu Ser Ala
 420 425 430
 Leu Met Met Gly Asp Asp Arg Ile Lys Pro Asp Asp Thr Arg His Asn
 435 440 445
 Pro Lys Leu Leu Gln Leu Ile Asn Leu Thr Ala Val Ala Ile Lys Arg
 450 455 460
 Leu Ile Lys Met Ala Lys Lys Ile Thr Ala Phe Arg Asp Met Cys Gln
 465 470 475 480
 Glu Asp Gln Val Ala Leu Leu Lys Gly Gly Cys Thr Glu Met Met Ile
 485 490 495
 Met Arg Ser Val Met Ile Tyr Asp Asp Arg Ala Ala Trp Lys Val
 500 505 510
 Pro His Thr Lys Glu Asn Met Gly Asn Ile Arg Thr Asp Leu Leu Lys
 515 520 525
 Phe Ala Glu Gly Asn Ile Tyr Glu Glu His Gln Lys Phe Ile Thr Thr
 530 535 540
 Phe Asp Glu Lys Trp Arg Met Asp Glu Asn Ile Ile Leu Ile Met Cys

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545 550 555 560

Ala Ile Val Leu Phe Thr Ser Ala Arg Ser Arg Val Ile His Lys Asp
565 570 575

Val Ile Arg Leu Glu Gln Asn Ser Tyr Tyr Tyr Leu Leu Arg Arg Tyr
580 585 590

Leu Glu Ser Val Tyr Ser Gly Cys Glu Ala Arg Asn Ala Phe Ile Lys
595 600 605

Leu Ile Gln Lys Ile Ser Asp Val Glu Arg Leu Asn Lys Phe Ile Ile
610 615 620

Asn Val Tyr Leu Asn Val Asn Pro Ser Gln Val Glu Pro Leu Leu Arg
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Glu Ile Phe Asp Leu Lys Asn His
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<210> 16

<211> 229

<212> PRT

<213> Anemonia majano

<400> 16

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Gly Asn Gly Lys Pro Tyr Glu Gly Thr Gln Thr Ser Thr Phe Lys Val
35 40 45

Thr Met Ala Asn Gly Gly Pro Leu Ala Phe Ser Phe Asp Ile Leu Ser
50 55 60

Thr Val Phe Lys Tyr Gly Asn Arg Cys Phe Thr Ala Tyr Pro Thr Ser
65 70 75 80

Met Pro Asp Tyr Phe Lys Gln Ala Phe Pro Asp Gly Met Ser Tyr Glu
85 90 95

Filed-s70397 main sequence listing.txt

Arg Thr Phe Thr Tyr Glu Asp Gly Gly Val Ala Thr Ala Ser Trp Glu
100 105 110

Ile Ser Leu Lys Gly Asn Cys Phe Glu His Lys Ser Thr Phe His Gly
115 120 125

Val Asn Phe Pro Ala Asp Gly Pro Val Met Ala Lys Lys Thr Thr Gly
130 135 140

Trp Asp Pro Ser Phe Glu Lys Met Thr Val Cys Asp Gly Ile Leu Lys
145 150 155 160

Gly Asp Val Thr Ala Phe Leu Met Leu Gln Gly Gly Gly Asn Tyr Arg
165 170 175

Cys Gln Phe His Thr Ser Tyr Lys Thr Lys Lys Pro Val Thr Met Pro
180 185 190

Pro Asn His Val Val Glu His Arg Ile Ala Arg Thr Asp Leu Asp Lys
195 200 205

Gly Gly Asn Ser Val Gln Leu Thr Glu His Ala Val Ala His Ile Thr
210 215 220

Ser Val Val Pro Phe
225

<210> 17

<211> 232

<212> PRT

<213> Anemonia sulcata

<400> 17

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20 25 30

Asn Pro Phe Glu Gly Thr Gln Glu Met Lys Ile Glu Val Ile Glu Gly
35 40 45

Gly Pro Leu Pro Phe Ala Phe His Ile Leu Ser Thr Ser Cys Met Tyr
50 55 60

Filed-s70397 main sequence listing.txt

Gly Ser Lys Thr Phe Ile Lys Tyr Val Ser Gly Ile Pro Asp Tyr Phe
65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Thr Tyr
85 90 95

Glu Asp Gly Gly Phe Leu Thr Ala His Gln Asp Thr Ser Leu Asp Gly
100 105 110

Asp Cys Leu Val Tyr Lys Val Lys Ile Leu Gly Asn Asn Phe Pro Ala
115 120 125

Asp Gly Pro Val Met Gln Asn Lys Ala Gly Arg Trp Glu Pro Ala Thr
130 135 140

Glu Ile Val Tyr Glu Val Asp Gly Val Leu Arg Gly Gln Ser Leu Met
145 150 155 160

Ala Leu Lys Cys Pro Gly Gly Arg His Leu Thr Cys His Leu His Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Pro Ala Ser Ala Leu Lys Met Pro Gly Phe
180 185 190

His Phe Glu Asp His Arg Ile Glu Ile Met Glu Glu Val Glu Lys Gly
195 200 205

Lys Cys Tyr Lys Gln Tyr Glu Ala Ala Val Gly Arg Tyr Cys Asp Ala
210 215 220

Ala Pro Ser Lys Leu Gly His Asn
225 230

<210> 18

<211> 231

<212> PRT

<213> Zoanthus sp.

<400> 18

Met Ala His Ser Lys His Gly Leu Lys Glu Glu Met Thr Met Lys Tyr
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20 25 30

Filed-s70397 main sequence listing.txt

Gly Ile Gly Tyr Pro Phe Lys Gly Lys Gln Thr Ile Asn Leu Cys Val
35 40 45

Ile Glu Gly Gly Pro Leu Pro Phe Ser Glu Asp Ile Leu Ser Ala Gly
50 55 60

Phe Lys Tyr Gly Asp Arg Ile Phe Thr Glu Tyr Pro Gln Asp Ile Val
65 70 75 80

Asp Tyr Phe Lys Asn Ser Cys Pro Ala Gly Tyr Thr Trp Gly Arg Ser
85 90 95

Phe Leu Phe Glu Asp Gly Ala Val Cys Ile Cys Asn Val Asp Ile Thr
100 105 110

Val Ser Val Lys Glu Asn Cys Ile Tyr His Lys Ser Ile Phe Asn Gly
115 120 125

Met Asn Phe Pro Ala Asp Gly Pro Val Met Lys Lys Met Thr Thr Asn
130 135 140

Trp Glu Ala Ser Cys Glu Lys Ile Met Pro Val Pro Lys Gln Gly Ile
145 150 155 160

Leu Lys Gly Asp Val Ser Met Tyr Leu Leu Leu Lys Asp Gly Gly Arg
165 170 175

Tyr Arg Cys Gln Phe Asp Thr Val Tyr Lys Ala Lys Ser Val Pro Ser
180 185 190

Lys Met Pro Glu Trp His Phe Ile Gln His Lys Leu Leu Arg Glu Asp
195 200 205

Arg Ser Asp Ala Lys Asn Gln Lys Trp Gln Leu Thr Glu His Ala Ile
210 215 220

Ala Phe Pro Ser Ala Leu Ala
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<210> 19

<211> 231

<212> PRT

<213> Zoanthus sp.

Filed-s70397 main sequence listing.txt

<400> 19

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20 25 30

Gly Ile Gly Tyr Pro Phe Lys Gly Lys Gln Ala Ile Asn Leu Cys Val
35 40 45

Val Glu Gly Gly Pro Leu Pro Phe Ala Glu Asp Ile Leu Ser Ala Ala
50 55 60

Phe Asn Tyr Gly Asn Arg Val Phe Thr Glu Tyr Pro Gln Asp Ile Val
65 70 75 80

Asp Tyr Phe Lys Asn Ser Cys Pro Ala Gly Tyr Thr Trp Asp Arg Ser
85 90 95

Phe Leu Phe Glu Asp Gly Ala Val Cys Ile Cys Asn Ala Asp Ile Thr
100 105 110

Val Ser Val Glu Glu Asn Cys Met Tyr His Glu Ser Lys Phe Tyr Gly
115 120 125

Val Asn Phe Pro Ala Asp Gly Pro Val Met Lys Lys Met Thr Asp Asn
130 135 140

Trp Glu Pro Ser Cys Glu Lys Ile Ile Pro Val Pro Lys Gln Gly Ile
145 150 155 160

Leu Lys Gly Asp Val Ser Met Tyr Leu Leu Lys Asp Gly Gly Arg
165 170 175

Leu Arg Cys Gln Phe Asp Thr Val Tyr Lys Ala Lys Ser Val Pro Arg
180 185 190

Lys Met Pro Asp Trp His Phe Ile Gln His Lys Leu Thr Arg Glu Asp
195 200 205

Arg Ser Asp Ala Lys Asn Gln Lys Trp His Leu Thr Glu His Ala Ile
210 215 220

Ala Ser Gly Ser Ala Leu Pro
225 230

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<210> 20

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> Forward degenerate primer

<220>

<221> misc_feature

<222> (3)..(21)

<223> N at each of positions 3, 6, 9, 12, 15 and 21 represents independently any one of A, C, T or G

<400> 20

ytntytnaarg gnggntgyac ngaratgatg

30

<210> 21

<211> 30

<212> DNA

<213> Artificial sequence

<220>

<223> Reverse degenerate primer

<220>

<221> misc_feature

<222> (1)..(7)

<223> N at each of positions 1, 4 and 7 represents independently any one of A, C, T or G.

<400> 21

ncknarnarr tartartarc trttytgytc

30